Missouri Department of Natural Resources
"Integrity and excellence in all we do"

Lewis and Clark State Office Building

Department fact sheet 9/2004

The Missouri Department of Natural Resources is constructing a new building to consolidate several central offices. The Lewis and Clark State Office Building incorporates numerous elements of sustainable design, which minimizes its impact on the environment and provides employees with a more productive work environment. The building's name was chosen to honor the Lewis and Clark expedition in their spirit of discovery, diplomacy and stewardship and to commemorate the bicentennial of their journey. The building is scheduled to be complete in fall 2004.

Office Space and Location

The building will house the department's Water Protection and Soil Conservation Division; the Water Resources Program, a branch of its Geological Survey and Resource Assessment Division; the department's Outreach and Assistance Center; its Division of Administrative Services; and the department Director's Office. More than 385 employees will have offices in this 120,000-square-foot building.

The building will be the first built as part of the Jefferson City Correctional Center (JCCC) redevelopment project. Adjacent acreage will provide space for future construction of public and private facilities. It will serve as a link between the JCCC redevelopment to the west and the wooded tract to the east of the building site, which is planned for recreational opportunities.

Green Design Elements

The construction project is registered with the U.S. Green Building Council. The building is expected to receive a LEED (Leadership in Energy and Environmental Design) certification rating of gold. The building will include several elements of sustainable design:

Daylighting:

- External above-window pre-cast concrete light shelves will allow penetration of sunlight during the winter months and help heat the building. They will also shade floors below during the summer months to eliminate both heat gain and uncomfortable working conditions.
- The external light shelves are then combined with internal light-weight light shelves designed to extend lighting into the building. This automatically adjusts lighting levels, using ceiling mounted sensors, which eliminates higher lighting levels than necessary, especially on sunny days.

Highly efficient mechanical systems for energy efficiency:

- These systems will integrate high-efficiency lighting with sensors and mechanical systems with daylighting. This will cut energy costs while improving employee work conditions and increasing productivity.

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- Photovoltaic roof (solar) collectors will supply 2.51 percent of total building energy usage.
- Ambient lighting will decrease glare and associated eye strain for employees.
- Floor diffusers or registers will allow employees to adjust air flow direction and fan speed into workstations.

Materials:

- A raised flooring system will allow wiring, and heating and cooling, to run under offices and workstations, which will decrease the time it takes to renovate space when needed and provide a more comfortable work environment.
- Exposed ceilings created due to the raised floor system will reduce the cost of materials.
- Designers selected materials that contained no Volatile Organic Compounds (VOCs) in order to improve indoor air quality.
- All materials meet federal recycled material content requirements, which help to create markets for recycled products and reduce landfill use. For example, the concrete used contains 25 percent fly ash.
- Native Missouri wood flooring from sustainable forests (Drey Pioneer Forest and Smith Flooring) is being used.
- Exterior features such as walkways, benches and landscaping material are being made from reused demolished building brick.

Water conservation:

- A below-ground gray water cistern using a sand and UV filtering system will collect rain water from the roof to flush toilets.
- Waterless urinals will eliminate the need for additional water.
- Landscaping will include native indigenous plants, grasses, shrubs and trees that require no additional water other than normal Missouri rainfall levels.
- A system of drain tiles, bio swales and detention ponds will hold rainwater to eliminate storm water runoff damage.

Recycling:

- A construction waste management plan has been implemented to reuse materials on site and eliminate landfill disposal.
- An internal recycled paper chute and collection system will eliminate the need for space for recycling bins on the office floors.

Building Cost:

- The cost for this construction is approximately $17 million.
- According to an article recently published in *Waste News*, the average cost increase for building a green office or school is between 0.5 percent and 6.5 percent. This publication also reported that a recent study showed constructing a green building saves between $50 to $65 per square foot over 20 years.

For More Information Contact

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